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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 June 2010*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

DETAILED ACTION

1. This Action is in response to the Amendment failed 6/21/2010. Claims 1-30 are pending and rejected.

Response to Arguments/Response to Amendments

2. Applicant's arguments regarding the 103(a) rejections were fully considered. Applicant argues that Armstrong does not teach measuring an effort value independent of duration of actual transaction channel occupancy, and does not teach determining a total effort for each transaction based on the effort values (p. 9 middle). The Examiner respectfully disagrees. The Examiner first recognizes that the combination of Eilbacher and Armstrong would have been drawn to handling phone, as well as email communications in a call center (see e.g., Armstrong, col. 9, ll. 64-65). E-mail communications are relevant here. E-mail messages are understood to be asynchronous communications because they comprise the kinds of exchanges described by the applicant (e.g. intermittent).

Regarding the claimed "effort value" in claim 1, the broadest reasonable interpretation has been applied. Thus, Armstrong teaches tracking agent performance statistics including an "average email handling time" (e.g., col. 10, ll. 1-16). This teaches or suggests the effort value for the transaction (i.e., to reflect time to evaluate and prepare a response), and a total effort for each transaction. The claimed effort value does not require any other particular measure of effort, and does not state that that the effort not be measured by the actual handling time duration. Rather, the claim

recites being "independent of duration of the transaction channel occupancy," which would be met by the combination's handling of emails, rather than phone calls.

Applicant further argues that Eilbacher and Armstrong cannot be combined because neither reference teaches the claimed subject matter regarding an effort value (Remarks, p. 9 bottom). The Examiner respectfully disagrees for the above reasons.

Applicant further argues that Eilbacher does not teach the counting of the number of exchanges between the agent and the client. Applicant states that Eilbacher relates to a call, which is not asynchronous, and that there is no mention of counting (Remarks, p. 10 top). The Examiner respectfully disagrees. As discussed above, the combination of references would relate to email conversations. Eilbacher teaches or suggests monitoring interactions between the agent and the client to evaluate the full customer experience (e.g., col. 10, ll. 13-20). Particularly, the number of transfers and conversations are recorded (e.g., col. 10, l. 16). This teaches or suggests the claimed "counting the number of exchanges between agent and client" because Eilbacher at least determines the number of conversations.

Applicant further argues that the prior art does not teach displaying a total effort value in real time, because there is no disclosure of a total effort value (p. 10 middle). The Examiner respectfully disagrees for at least the reasons given above. The Examiner also recognizes that an average value is calculated by the total divided by the number of items to average.[1] Thus, calculating an average would also imply calculating a total value.

_____

[1] See Webster's Online Dictionary, average, arithmetic mean.

Applicant further argues that the prior art does not teach the claimed effort value based on how long a transmission would require if spoken. The Examiner respectfully disagrees. The claimed effort value is merely an equivalent measure of time. Eilbacher and Armstrong already deal in an amount of time for a transmission. That measure may be an actual amount of time. However, Ulrich teaches that a normalizing calculation can be used to convert the number of words in a message into a duration based on word per minute reading speeds (e.g., col. 8, ll. 5-8). This is an equivalent amount of time. Furthermore, Ichbiah teaches or suggests that the speed of speech is at least 200 words per minute (e.g., col. 1, ll. 25-26). Thus, as combined, the normalizing calculation may be based on word per minute speaking speeds, to arrive at the claimed equivalent time value if the message were spoken.

Applicant's further arguments depend on the above arguments. For the above reasons, the prior art rejection is maintained where applicable.

Claim Objections

3. **Claims 1-30 as amended are objected to because of the following informalities:**

As to claim 1, line 14, the phrase "of the" appears to be missing.

As to claim 2, line 1, the word "the" appears to have an extra space between the "T" and the "H".

Claims 2-12 depend from claim 1.

As to claims 13 and 25, the claimed apparatus should comprise a piece of

hardware to make clearer that the claim is drawn to a statutory class of invention, and to

avoid being understood as software per se.

Claims 14-24 and 26-30 depend from claims 13 or 25.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-10, 13-17, and 19-29 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Eilbacher et al (U.S. Patent 6,724,887), hereafter

"Eilbacher," in view of Armstrong (U.S. Patent 6,356,633), hereinafter

"Armstrong," and further in view of Ulrich (U.S. Patent 6,895,438), hereinafter

"Ulrich."

As to claim 1, Eilbacher teaches the claimed subject matter including:

Compiling performance reports (col. 10, ll. 50-62) in a contact center (fig. 5,

#201) serving a plurality of clients (fig. 3, #100) using a plurality of agents (fig. 3, #104);

Opening a transaction file (col. 10, ll. 28-44) for saving information about exchanges (col. 6, ll. 1-8) between an agent of the plurality of agents and a client of the plurality of clients;

Measuring indicia of activity (e.g., satisfactory or unsatisfactory experience, col. 12, ll. 54-55, or various captured data, col. 10, ll. 27-44, including email communications, fig. 5, #202) for the exchanges between the agent and client.

Adding the measured indicia of activity to the transaction file (col. 12, ll. 54-64, col. 11, ll. 50-54, col. 10, ll. 27-61); and

Compiling a report based upon the transaction file (col. 9, ll. 57-67, col. 12, ll. 54-64).

Eilbacher does not expressly teach:

1) (performing the above) in regard to asynchronous transactions (understood to include emails)

2) an effort value (for the asynchronous transactions) including an effort value which represents effective effort to respond to each transmission within each respective transaction, wherein effective effort is calculated to reflect time to evaluate and prepare a response and is independent of total duration of actual transaction channel occupancy;

3) determining a total effort value for each respective transaction based on the effort values of each non-contiguous transmissions within the transaction;

4) displaying the total effort value for each respective transaction.

However, as to (1), Eilbacher teaches analyzing communications in a call center environment (e.g., col. 8, ll. 29-65), but further teaches an email transaction (e.g., fig. 5, #202). An email transaction is asynchronous because it is an intermittent transaction in which data is created and then transmitted, consistent with the description in Applicant's specification (p. 10).

Furthermore, Armstrong teaches that emails may be handled as though they were calls handled by a call center (e.g., col. 9, ll. 64-66). The emails are analyzed by the system to generate reports (e.g., col. 10, ll. 1-16).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eilbacher, such that emails (i.e., asynchronous transactions) are supported. The motivation would have been to support generating management reports of the email messages and to further track the agent and minimize agent idle time, as taught by Armstrong (e.g., col. 8, l. 60 - col. 10, l. 16).

Eilbacher and Armstrong would further teach or suggest (2) and (3) above. Armstrong as applied above teaches or suggests agent tracking statistics based on emails, including average time between receipt and response (of the email) and average email message handling time (e.g., col. 10, ll. 1-16). Such calculations teach or suggest the claimed subject matter of calculating an effort value to respond to each transmission within each transaction, reflecting time to evaluate and prepare a response, and determining a total effort value, as claimed.

Eilbacher and Armstrong do not expressly teach (4). However, since Armstrong generates management reports, those reports could, and should be displayed in order

for a person to view them. For example, for each respective transaction (e.g.,

Armstrong, col. 10, l. 1-15), the average can be displayed. An average is calculated

from a total value divided by the number of items to average, so any other information

such as the total, and number of items (noncontiguous transmission), can also be

displayed. Furthermore, Ulrich teaches a display (e.g., fig. 4, #67).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify Eilbacher and Armstrong, such that the total

effort value is displayed. The motivation would have been to allow a person (such as a

manager) to view them, as known to one of ordinary skill in the art. This increases user

friendliness and increases the informative value of the user interface.

Eilbacher, Armstrong, and Ulrich as applied above would further teach or suggest

performing the claimed steps on the transactions "made up of a plurality of non

contiguous transmissions" because emails are handled as messages and sent to a

mailbox (e.g., Armstrong, fig. 3A), and thus, related emails may be separated by other

emails, and sorted/routed to the agent as necessary. Also see Ulrich, fig. 3A. This

teaches or suggests non-contiguous transmissions.

As to claim 2, Eilbacher as applied above further teaches wherein the step of

opening the transaction file further comprises detecting an initial contact between the

agent and the client (e.g., caller initiated transaction, col. 9, ll. 10-20), and tagging

subsequent transmissions as belonging to the transaction (col. 9, l. 10-50). Note that

the tagging has to occur or else the system would not know what communications to

group together into a customer experience (col. 9-10).

Eilbacher does not expressly teach assigning a transmission type.

However, Eilbacher supports various communication formats (e.g., col. 6, ll. 1-3, 20-35) and stores communications by data type (e.g., col. 10, l. 32). Ulrich teaches recording the transaction type (e.g., fig. 2, #17E). This teaches or suggests storing assigning a transmission type.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eilbacher and Armstrong, such that a transmission type is stored. The motivation would have been to facilitate organization of data in the storage.

As to claim 3, Eilbacher, Armstrong, and Ulrich as applied above teach identifying a prior contact of an agent involving the client (Eilbacher, col. 13, ll. 1-40, col. 5, ll. 22-25). Contacts of an agent are stored in a database (Eilbacher, col. 10, ll. 27-44).

Eilbacher, Armstrong, and Ulrich do not expressly teach wherein a prior contact list of the agent is searched to identify prior contacts, or wherein the searching is performed when the initial contact is detected between the agent and client.

However, Eilbacher teaches detecting initial contact (using cradle to grave recording, col. 9, ll. 14-20), and storing the agent's communications in a database (col. 10, ll. 28-44). The database stores the customer and the agent (col. 10, ll. 36-39), and marks unsatisfactory communications (col. 11, ll. 51-53).

Furthermore, Ulrich discloses a contact list (fig. 3A-3B).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify Eilbacher, Armstrong, and Ulrich, such that

unsatisfactory contacts with customers (Eilbacher, col. 11, ll. 51-53) are stored in the

list. The motivation would have been to facilitate knowing if the agent had a previous

conversation(s) with the customer (by searching a smaller list, instead of potentially the

entire customer database), and to inform the agent when contact is established that

he/she is speaking to a customer with a previous unsatisfactory experience, as taught

by Eilbacher (col. 5, ll. 22-25). As such, the claim limitations would be met.

As to claim 4, Eilbacher as applied above further teaches wherein the step of

measuring the indicia of activity further comprises counting a number of asynchronous

exchanges between the agent and the client (e.g., number of conversations or number

of transfers, col. 10, ll. 13-17; emails handled the same way as calls, see above).

Eilbacher, Armstrong, and Ulrich do not expressly teach, "to close a sale."

However, Eilbacher teaches counting the number of exchanges in "cradle-to-

grave" transactions (col. 10, ll. 4-17). "Cradle-to-grave" transactions can end when the

agent completes a transaction (col. 9, l. 18). Since Eilbacher is drawn to customers of a

call center, the transactions may be sale transactions (e.g., col. 1, l. 64, col. 2, l. 54, col.

7, l. 65).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to further modify Eilbacher, Armstrong, and Ulrich, such that the

agent's transactions are sales transactions. Therefore, when the agent completes a

transaction, the agent closes a sale, which meets the claimed subject matter. The

motivation would have been to use Eilbacher in a sales environment, as known to one

of ordinary skill in the art.

As to claim 5, Eilbacher as applied above further teaches wherein the

exchanges comprise email (see e.g., fig. 5).

As to claim 6, Armstrong as applied above further teaches or suggests an

average time between messages of transactions for each agent (col. 10, ll. 4-11).

As to claim 7, Eilbacher, Armstrong, and Ulrich as applied above do not

expressly teach how much time has elapsed between successive transmissions of each

asynchronous transaction.

However, Eilbacher teaches a "wait time" col. 6, ll. 35-40 and measuring the

amount of time a customer is on hold (see description for figs. 2-3). The time on hold

can be an elapsed time between successive communications. Eilbacher also teaches

recording start/end times for communication, and states that all data associated with

customer-agent communication can be recorded (col. 8, ll. 50-65). As applied above,

emails are handled in the same way as calls.

Furthermore, Armstrong teaches the time between email receipt and response

(e.g., col. 10, ll. 8-12). This further teaches or suggests how much time has elapsed

between successive transmissions of each asynchronous transaction.

Since e-mail conversations are treated like phone conversations as discussed

above, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to further modify Eilbacher, Armstrong, and Ulrich, such that

elapsed time between successive transmissions of email transactions are determined

and recorded. The motivation would have been to facilitate customer experience

analysis, taught by Eilbacher (col. 11, col. 6, ll. 35-40), and to further facilitate tracking

the agent and minimizing idle time, as taught by Armstrong (e.g., col. 9, l. 60 – col. 10, l.

16).

As to claims 8 and 9, Eilbacher as applied above further teaches segregating

exchanges between the agent and client from other exchanges between other agents

and other clients (Eilbacher, col. 10, ll. 36-44), and from other exchanges between the

agent and the client (e.g., using a time stamp for an exchange between agent and

client, col. 10, l. 37), further comprising correlating an identifier of the agent and client

with the transaction file (i.e., customer and agent identification, col. 10, ll. 36-37). Since

every transaction is marked by a time stamp, agent name, customer name, etc., each

exchange is segregated from other exchanges between agents and other clients, as

well as the agent and the client, because the other transactions are marked with

different time stamps, agent names, and customer names.

As to claim 10, Eilbacher, Armstrong, and Ulrich do not expressly teach wherein

correlating an identifier of the agent and client with the transaction file further comprises

matching e-mail addresses of the agent and client to e-mail addresses within the

transaction file.

However, Ulrich teaches wherein correlating an identifier of the agent and client

with the transaction file further comprises matching e-mail addresses of the agent and

client to e-mail addresses within the transaction file (see fig. 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eilbacher, Armstrong, and Ulrich, such that the above claimed subject matter is implemented. The motivation would have been to facilitate organization of data, as known to one of ordinary skill in the art.

As to claim 19, Eilbacher, Armstrong, and Ulrich do not expressly teach wherein word content of each exchange is used to determine whether different transactions are part of one or different transactions.

However, Ulrich teaches wherein word content of each exchange is used to determine whether different transmissions are part of one transaction or different transactions (see fig. 3, col. 7, ll. 45-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eilbacher, Armstrong, and Ulrich, such that word content is used as claimed. The motivation would have been to facilitate organization of data, as known to one of ordinary skill in the art.

As to claim 24, Eilbacher, Armstrong, and Ulrich do not expressly teach correlating a subject matter identifier field of the exchanges with a subject matter identifier of the transaction file.

However, Ulrich teaches correlating a subject matter identifier field of the exchanges with a subject matter identifier of the transaction file (see fig. 3).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eilbacher, Armstrong, and Ulrich, such that the

above correlation is accomplished. The motivation would have been to facilitate organizing data, as known to one of ordinary skill in the art.

As to claim 26, Eilbacher as applied above further teaches "selection processor...initial contact" as seen in claim 2 above, and determining a type for each transaction, and attaching a time stamp to each transmission within a transaction (col. 10, ll. 27-45).

As to claim 27, Eilbacher as applied above does not expressly teach wherein the agent selection processor comprises a pending transactions list adapted for identifying pending transactions involving the client and an application which uses the pending transactions list to assign a new transaction with the client to the agent as a new transaction to preserve continuity.

However, Armstrong teaches or suggests correlating keywords from an incoming message to route the message to an appropriate agent (e.g., figs. 3A-3B). The incoming messages could be stored in a list to facilitate access (e.g., fig. 3A, #304). Ulrich discloses messages arranged in a list, including sender, recipient, and key words (e.g., fig. 3A). Armstrong further teaches or suggests that when the message is assigned to an agent, it is sent to the mailbox of the agent (e.g., fig. 3B), This suggests assigning a new transaction with the client to the agent and preserving continuity, because it would be likely that any previous messages sent by a client regarding the same topic (e.g., keywords) would match the skill set of the agent (e.g., Ulrich, fig. 3A, "patent filing"), and thus would be routed to the same agent with those skill sets.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eilbacher, Armstrong, and Ulrich, such that the agent selection processor comprises a pending transactions list adapted for identifying pending transactions involving the client and an application which uses the pending transactions list to assign a new transaction with the client to the agent as a new transaction to preserve continuity. The motivation would have been to facilitate routing a message to the appropriate agent by the keyword(s) the message contains, as taught by Armstrong (e.g., col. 5, ll. 50-60). This improves customer service, because messages, including subsequent messages, could be routed to the appropriate agent.

As to claim 29, Eilbacher, Armstrong, and Ulrich teach an effort value, as discussed above, but do not expressly teach using proportionality to calculate an equivalent time of effort.

However, Ulrich teaches wherein an effort value is determined using proportionality to calculate an equivalent time of effort (e.g., col. 7, l. 35 – col. 8, l. 67, col. 10, l. 13 – l. 49). This equivalent time of effort is an equivalent time from the reader's perspective.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eilbacher, Armstrong, and Ulrich, such that an equivalent time of effort is additionally calculated. The motivation would have been to provide a heuristic measure of who and what is consuming time and whether those demands on time are line with organizational priorities, as taught by Ulrich (col. 10, ll. 46-50).

Claims 13-17, 20-23, 25, and 28 are rejected based on the same reasoning as

the above claims.

5. **Claims 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable**

over Eilbacher, Armstrong, and Ulrich, and further in view of McCalmont et al

(U.S. Patent 5,621,789), hereafter "McCalmont."

As to claim 11, Eilbacher, Armstrong, and Ulrich teach or suggest completed

transactions, as discussed above, and further teach or suggest determining and

displaying a total effort value between the agent and client, but do not expressly teach

determining in real time an ongoing transaction total effort value for ongoing

transactions.

However, McCalmont displays a total effort between agent and client in real time

(fig. 5b).

Therefore, it would have been obvious to one of ordinary skill in the art at the

time the invention was made to modify Eilbacher, Armstrong, and Ulrich, such that real

time statistics on total ongoing transaction effort between the agent and client are

displayed. The motivation would have been to indicate to the user the efficiency of his

work, as taught by McCalmont (col. 6, ll. 62-64).

As to claim 12, Ulrich as applied above further teaches or suggests correlating a

subject matter identifier field of the exchanges with a subject matter identifier of the

transaction file (see fig. 3). For the remaining claim limitations, see claims 8-9.

6. Claims 18 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eilbacher, Armstrong, and Ulrich, and further in view of Ichbiah (U.S. Patent 5,623,406).

As to claims 18 and 30, Eilbacher, Armstrong, and Ulrich teach an effort value (e.g., equivalent effort value), as discussed above, but do not expressly teach wherein the effort value is determined based upon how long a transmission would have required had it been spoken, or based on the character length of the transmission.

However, telephone responses can be spoken, and e-mail responses can be typed. Ichbiah states that normal speech is about 100 words per minute, and a skilled typist can be expected to type at 40-70 words per minute (col. 1, ll. 20-25). Typing at a certain number of words per minute is based on character length, since typed words have characters.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Eilbacher, Armstrong, and Ulrich, such that the email response time (effort value) is based on how long the email would have taken if it were spoken, or based on how long the email would have taken if it was typed by a skilled typist [e.g., 70 words (characters) per minute]. The motivation would have to apply a performance standard for email agents, as known to one of ordinary skill in the art. For example, a call center might want to assume that typing an email deserves the same amount of response time as speaking. Other call centers might want to account for the fact that typing is slower than speaking.

Conclusion

7. Applicant's arguments were fully considered but were not persuasive. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles E. Lu whose telephone number is (571) 272-8594. The examiner can normally be reached on 8:30 - 5:00; M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached at (571) 272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

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/Charles E Lu/
Examiner, Art Unit 2161
7/17/2010